

Uncompressed HDTV over IP

Sponsored By: DARPA

Performed by: Tektronix, University of Washington, and University of Southern California/Information Sciences Institute (USC/ISI)

Description:

Uncompressed high definition TV signals in SMPTE-292M format will be transported over an IP network in this demonstration.

Challenging applications require an entire data stream to be sent in real time. This is the first time the transport of studio quality uncompressed HDTV over IP has been demonstrated.

- The uncompressed SMPTE-292 media stream comprises an RTP/UDP/IP flow at approximately 1.5 Gbps
- Media encoding and packetization are implemented via a Network Access Engine with wide area transport across the SuperNet/Abilene backbone

Key Accomplishments:

- Transport of uncompressed HDTV content over a high speed Internet backbone at 1.5 Gbps
- Development of a Network Access Engine architecture for bit-rate and protocol adaptive interfacing of HDTV and other signals to WAN network technologies
- Development of a standard RTP payload format for transport of HDTV transport streams (SMPTE-292M format) over RTP/UDP/IP networks.

www.tek.com/Measurement/commtest/darpa/darpa.html

www.east.isi.edu/projects/NMAA

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